

IN THE CLAIMS

1. (Canceled) .

2. (Original) A gas insulating apparatus wherein a sensor portion of a device for measuring at least either current flowing through a line from the power inlet to the power outlet or voltage of said line is installed inside a bushing, and the bushing is installed at least either at said power inlet or said power outlet.

3. (Original) A gas insulating apparatus wherein a line is arranged such that the power drawn from a first bushing is guided to a second bushing at least via a first disconnecter unit, a circuit-breaker unit and a second disconnecter unit, and a sensor portion of a device for measuring at least either current flowing through the line or voltage of the line is installed at least either inside said first bushing or inside said second bushing.

4. (Original) A gas insulating apparatus wherein a line is arranged such that the power drawn from a bushing is guided to a bus unit at least via a first disconnecter unit, a circuit-breaker unit and a second disconnecter unit, and a sensor portion of a device for measuring at least either current flowing through the line or voltage of the line is installed inside said bushing.

5. (Original) A gas insulating apparatus comprising a bushing at least either at the power inlet or the power outlet,

the bushing comprising a porcelain tube filled with an insulating medium, a current-carrying conductor disposed inside the porcelain tube, an electric field relaxation member disposed facing the outer-periphery side of the current-carrying conductor, and a sensor portion of a device which is disposed inside the porcelain tube and measures at least either current flowing through said current-carrying conductor or voltage of said current-carrying conductor.

6. (Original) A gas insulating apparatus according to Claim 5, wherein the sensor portion of said current measuring device is installed on the outer-periphery side of said electric field relaxation member.

7. (Original) A gas insulating apparatus according to Claim 2, wherein the sensor portion of said voltage measuring device is installed at least either on the outer-periphery side of said electric field relaxation member or the inner-periphery side thereof.

8. (Original) A gas insulating apparatus comprising a bushing at least either at the power inlet or the power outlet,

the bushing comprising a porcelain tube filled with an insulating medium, a current-carrying conductor disposed inside the porcelain tube, an electric field relaxation member disposed facing the outer-periphery side of the current-carrying conductor, and a current transformer which is grounded on the outer-periphery side of the electric field

relaxation member and measures current flowing through said current-carrying conductor.

9. (Original) A gas insulating apparatus comprising a bushing at least either at the power inlet or the power outlet,

the bushing comprising a porcelain tube filled with an insulating medium, a current-carrying conductor disposed inside the porcelain tube, an electric field relaxation member disposed facing the outer-periphery side of said porcelain tube, and a current transformer which is disposed together with the electric field relaxation member and measures current flowing through said current-carrying conductor.

10. (Original) A gas insulating apparatus comprising a bushing at least either at the power inlet or the power outlet,

the bushing comprising a porcelain tube filled with an insulating medium, a current-carrying conductor disposed inside the porcelain tube, an electric field relaxation member disposed facing the outer-periphery side of the current-

carrying conductor, and a voltage divider which is disposed on the outer-periphery side of the electric field relaxation member, electrostatically divides said current-carrying conductor and said electric field relaxation member, and measures voltage of said current-carrying conductor.

11. (Original) A gas insulating apparatus comprising a bushing at least either at the power inlet or the power outlet,

the bushing comprising a porcelain tube filled with an insulating medium, a current-carrying conductor disposed inside the porcelain tube, an electric field relaxation member disposed facing the outer-periphery side of the current-carrying conductor, and a voltage divider which is disposed on the inner-periphery side of the electric field relaxation member, electrostatically divides said current-carrying conductor and said electric field relaxation member, and measures voltage of said current-carrying conductor.

12. (Original) A gas insulating apparatus comprising a bushing at least either at the power inlet or the power outlet,

the bushing comprising a porcelain tube filled with an insulating medium, a current-carrying conductor disposed inside the porcelain tube, an electric field relaxation member disposed facing the outer-periphery side of the current-carrying conductor, and an electrostatic capacity disposed on the outer-periphery side of the electric field relaxation member, one end side of said electrostatic capacity being electrically connected to the electric field relaxation member and the other end side of said electrostatic capacity being grounded.

13. (Original) A gas insulating apparatus comprising a bushing at least either at the power inlet or the power outlet,

the bushing comprising a porcelain tube filled with an insulating medium, a current-carrying conductor disposed inside the porcelain tube, an electric field relaxation member disposed facing the outer-periphery side of the current-

carrying conductor, a current transformer which is disposed on the outer-periphery side of the electric field relaxation member and measures current flowing through said current-carrying conductor, and a voltage divider which is disposed on the inner-periphery side of said electric field relaxation member, electrostatically divides said current-carrying conductor and said electric field relaxation member, and measures voltage of said current-carrying conductor.

14. (Currently Amended) A method for locating a fault point of a gas insulating apparatus, whereby comprising:

measuring either current flowing through a line from a first bushing to a second bushing or voltage by using said first bushing and said second bushing, said first and second bushings each having a sensor portion for current or voltage measurement combined therewith, and

based on the measurement results, locating the fault point of the gas insulating apparatus.

15. (Currently Amended) A method for locating a fault point of a gas insulating apparatus, whereby comprising:

measuring either current flowing through a line from a first bushing to a second bushing or voltage by using sensors installed in said first bushing and said second bushing, comparing signals output from the two sensors, and based on the measurement results, determining whether the fault point is located inside or outside the gas insulating apparatus, or in which portion of the gas insulation switchgear the fault point is located.

16. (Original) A method for locating a fault point of a gas insulating apparatus according to Claim 15, wherein whether said fault point is located inside or outside the gas insulating apparatus is determined based on the consistency of polarities of the signals output from said two sensors.

17. (Original) A method for locating a fault point of a gas insulating apparatus according to Claim 15, wherein in which portion of the gas insulation switchgear the fault point is located is determined based on the difference of measuring time of the signals output from said two sensors.